VAX Systems Summary

A Complete Family of Proven, Powerful, Open Systems

Putting Imagination to Work . . .

Implementing Open Client/Server Solutions

The VAX family includes a broad range of 100 percent compatible systems from the desktop to the data center, ensuring that there's a system correctly sized for your computing needs. Because they are all part of the same family, they support the same operating systems and applications and offer the same high levels of functionality and openness.

VAX systems are built upon extremely fast microprocessors for outstanding performance. Their fast CPUs are combined with advanced, high-speed I/O subsystems, large memory capacities, and the latest storage devices to create very well-balanced systems. Their performance is complemented by low initial cost and low maintenance cost to create a level of price/performance that meets your toughest qualifications.

The system features for data protection and high availability keep your mission-critical applications running around the clock. Designed for uptime, VAX systems include built-in features that ensure data integrity, security, and reliability. And if your needs grow, they offer you many ways to expand, including symmetric multiprocessing, networking, and clustering. Several clustering options are available to you, ranging from a cluster of systems in a single office to a cluster of systems located hundreds of kilometers apart.

One of the features of VAX systems is that they are "Alpha-ready." This means that if you have a VAX system, you have already made most of the investments necessary for an Alpha AXP™ system. For example, the skills you have learned on OpenVMS VAX systems will be the same skills you'll need for an OpenVMS Alpha AXP system. And the applications and data will be the same too. The superior features of VAX systems make them well equipped to meet your most demanding needs now and well in to the future.

October 1993

OpenVMS VAX System Comparison Chart

System	VAXstation 4000 VLC, Model 60, and Model 90 Workstations	MicroVAX 3100 Models 30, 40, 80, and 90 Desktop Systems
Performance*	VLC: 6.2 SPECmark89® Model 60: 12.0 SPECmark89 Model 90: 32.8 SPECmark89	Models 30, 40: 21 TPS Model 80: 28 TPS Model 90: 85 TPS
Number of Processors	1	1
CPU Clock Speed	VLC: 25 MHz Model 60: 55 MHz Model 90: 72 MHz	Models 30 and 40: 25 MHz Model 80: 50 MHz Model 90: 72 MHz
Cache Size (On Chip/On Board)	VLC: 8 KB/0 KB Models 60 and 90: 2 KB/256 KB	Models 30 and 40: 6 KB/0 KB Model 80: 2 KB/256 KB Model 90: 10 KB/128 KB
In-Cabinet CPU Upgrade	Model 60 upgrades to Model 90	Model 40 upgrades to Model 80 or Model 90 Model 80 upgrades to Model 90
Alpha-Ready System Upgrade	VLC upgrades to DEC 3000 Model 300 AXP workstation Models 60 and 90 upgrade to DEC 3000 Models 600 and 800 AXP workstations	System upgrades to DEC 2000 Model 300 AXP and DEC 3000 Models 600S and 800S AXP servers
I/O Features		
Maximum Memory Capacity	VLC: 24 MB Model 60: 104 MB Model 90: 128 MB	Models 30 and 40: 32 MB Model 80: 72 MB Model 90: 128 MB
Maximum Disk Capacity (in cabinet/ total)	VLC: 245 MB/8.5 GB Models 60 and 90: 2.1 GB/9.3 GB	5.3 GB/8.7 GB
Maximum I/O Bandwidth	VLC: 5 MB/s Models 60 and 90: 10 MB/s	4 MB/s
I/O Support	VLC: SCSI, Ethernet Models 60 and 90: SCSI, Ethernet, 1-slot TURBOchannel Model 90: FDDI	1 SCSI (30/40/80), 2 SCSI (90), Ethernet
High-Availability Features		
OpenVMS Clusters	All models: Ethernet Model 90: FDDI	Ethernet
High-Availability Features Supported	Disk shadowing	Disk shadowing
Software Features		
Operating Systems	OpenVMS, VAXELN	OpenVMS

*All TPS performance is estimated.

VAX 4000 Model 100A Desktop System	VAX 4000 Models 500A, 600A, and 700A Department/Distributed Systems
95 TPS	Model 500A: 116 TPS Model 600A: 183 TPS Model 700A: 253 TPS
1	1
72 MHz	Model 500A: 72 MHz Model 600A: 83 MHz Model 700A: 100 MHz
10 KB/128 KB	Model 500A: 10 KB/128 KB Model 600A: 10 KB/512 KB Model 700A: 10 KB/2 MB
N/A	Each VAX 4000 pedestal system upgrades to any higher VAX 4000 system
System upgrades to DEC 3000 Models 600S and 800S AXP servers	System upgrades to DEC 4000 AXP system
128 MB	512 MB
4.8 GB/75 GB	14.4 GB/151 GB
16.3 MB/s	20.3 MB/s
4 DSSI 1 SCSI, 3 Ethernet, Q-bus	6 DSSI, Q-bus, 3 Ethernet
Ethernet, DSSI	Ethernet, DSSI
Disk shadowing, uninterruptible power supply	Disk shadowing, uninterruptible power supply
OpenVMS	OpenVMS

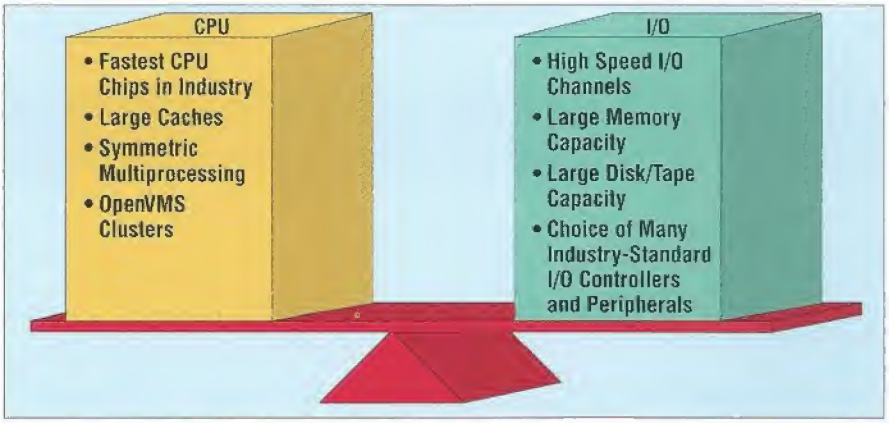
Performance is highly dependent on configuration, application, and operating environment. Individual workloads should be carefully evaluated before making performance estimates for specific applications. In this chart, no warranty of system performance is expressed or implied.

Details on configurations are found in the *Digital Systems and Options Catalog*.

VAXft Models 110, 410, and 810 Fault-Tolerant Systems	VAX 7000 Data Center Systems and VAX 10000 Enterprise Systems	System
Model 110: 13 TPS Model 410: 18 TPS Model 810: 90 TPS	Model 610: N/A Model 620: 335 TPS	Performance*
2 × 2 redundant processors	Up to 6	Number of Processors
Model 110: 16 MHz Model 410: 28 MHz Model 810: 83 MHz	91 MHz	CPU Clock Speed
Model 110: 1 KB/32 KB Model 410: 6 KB/128 KB Model 810: 8 KB/512 KB	10 KB/4 MB per processor	Cache Size (On Chip/On Board)
N/A	To symmetric multiprocessing VAX CPUs, and to Alpha AXP CPUs	In-Cabinet CPU Upgrade
N/A	In-cabinet CPU upgrade to DEC 7000 AXP system or DEC 10000 AXP system	Alpha-Ready System Upgrade
		I/O Features
Model 110: 96 MB Models 410, 810: 256 MB	3.5 GB	Maximum Memory Capacity
Model 110: 4 GB/4 GB Model 410: 8 GB/48 GB Model 810: 56 GB	42 GB/Over 10 TB	Maximum Disk Capacity (in cabinet/ total)
Models 110, 410: 8 MB/s Model 810: 10 MB/s	400 MB/s	Maximum I/O Bandwidth
Model 110: 2 DSSI, 3 Ethernet Model 410: 2 DSSI, 4 Ethernet Model 810: 6 DSSI, 4 Ethernet (8 total)	4 XMI, 10 CI, 24 DSSI, 8 FDDI, 16 Ethernet, 12 SDI, 6 VAXBI, 8 VME	I/O Support
		High-Availability Features
Ethernet, DSSI	Ethernet, DSSI, CI, FDDI	OpenVMS Clusters
Disk shadowing, uninterruptible power system, battery backup, full hardware redundancy, automatic transparent online reconfiguration	Disk shadowing, N+1 redundant power system,† integrated uninterruptible power system,† integrated power conditioning	High-Availability Features Supported
		Software Features
OpenVMS	OpenVMS	Operating Systems

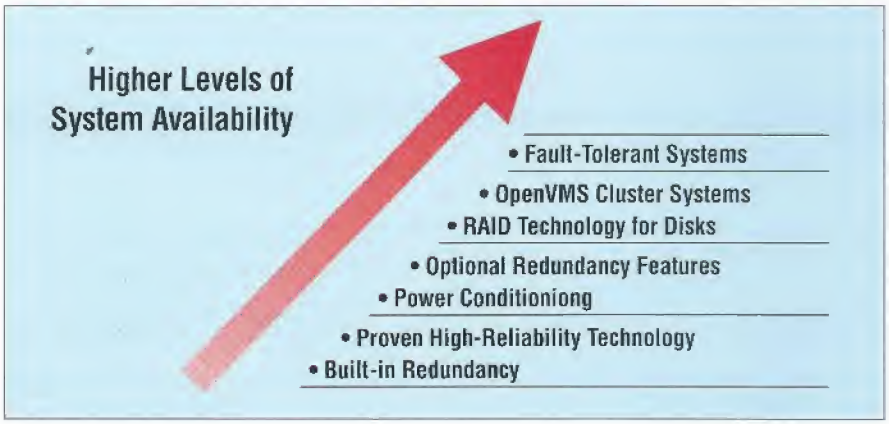
† Standard on the VAX 10000. Optional on the VAX 7000.

High-Performance, Balanced Systems



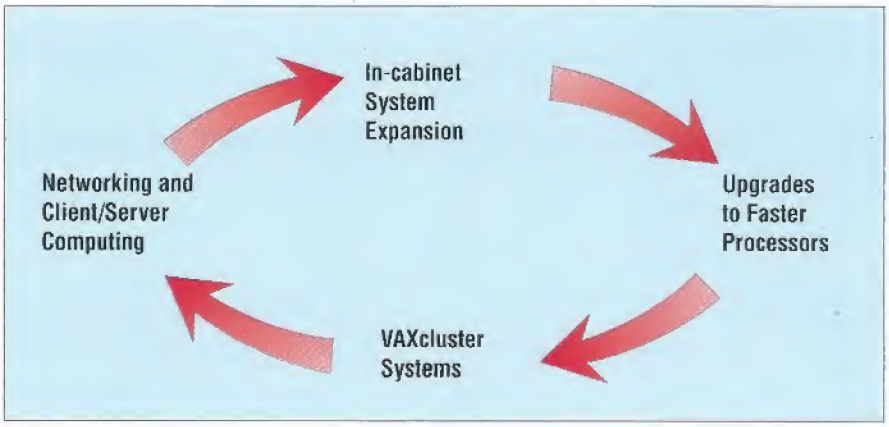
To take full advantage of fast microprocessors, you need to balance their speed with advanced I/O features. A truly balanced system can handle the toughest applications and the largest databases.

The Highest Levels of System Availability



VAX systems offer features for high availability that keep your business-critical applications running day and night, through fire and flood. With features ranging from built-in hardware and software redundancy, to several types of clustering, to fault-tolerant systems, there is a level of high availability that suits your business needs.

Unprecedented Expansion



VAX systems offer several ways to grow and expand as your needs grow. Traditional ways of expanding a system include adding more processors to your present system, or upgrading to a faster VAX or AXP processor. You can also place VAX systems in several types of clusters, in client/server configurations, and in global networks to expand their abilities to deliver cost-effective, up-to-the-minute solutions.

digital

For More Information

For more information on the VAX family and Digital's many other products, please contact your local Digital representative or reseller. With sales and service offices located all over the globe, Digital can provide the information you need to become more productive.

Digital believes the information in this publication is accurate as of its publication date; such information is subject to change without notice. Digital is not responsible for any errors in the information given in this publication.

Digital will conduct its business in a manner that conserves the environment.

The following are trademarks of Digital Equipment Corporation: Alpha AXP, AXP, DEC, the DIGITAL logo, DSSI, MicroVAX, OpenVMS, Q-bus, VAX, VAXBI, VAXcluster, VAXft, VAXstation, VMS.

SPEC is a registered trademark of the Standard Performance Evaluation Corporation.

Printed in U.S.A. EC-F2564-93 Rel. #24/93 09 72 60.0 Copyright 1993 Digital Equipment Corporation All Rights Reserved